

# THE EFFECT OF EMOTIONAL CUES ON EVENT-BASED PROSPECTIVE MEMORY PERFORMANCE IN OBSESSIVE COMPULSIVE DISORDER

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## Introduction:

Prospective memory (PM) is defined as the ability to formulate, retain and carry out intentions, plans and promises at the appropriate time or in the appropriate context. Previous studies found evidence that patients with obsessive compulsive disorder (OCD) beside the executive deficit manifest impairment in various PM tasks (Harris et al., 2010; Racsmány et al., 2011; Yang et al., 2015). Our aim with this study was to investigate the influence of emotional stimuli on event-based PM performance in OCD.

## Material and methods:

Thirteen OCD patients took part in the study. An emotional event-based PM task was administered to each participant under two conditions: (1) a baseline condition in which no PM stimuli occurred and the ongoing trials were presented in three blocks based on the stimulus valence as positive, negative and neutral and a (2) PM condition in which beside the ongoing trials positive, negative and neutral PM stimuli also occurred. There were two arrows, pointing right and left, and one of them was black, the other was white. The order of colours varied randomly. Two pictures also appeared on the screen and were located at equal distances above and below the arrows. Participants in the baseline condition were asked to press the arrow key corresponding to the black arrow (ongoing task). In the PM condition the task was similar, except participants were told to press the up-arrow key if the two pictures above and below the fixation point were the same on any trial, this instruction served as a PM task.

## Results and conclusions:

Based on our preliminary results and analysis it seems that the stimulus valence does not influence significantly the accuracy rate and reaction time scores on PM trials. The emotional cues have no beneficial effect on patients PM performance as suggested in previous findings. Further analysis and the recruitment of a healthy control group are under way.

Keywords: obsessive-compulsive disorder, event-based prospective memory, attentional bias

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## Conflict of interest:

There are no conflicts of interests.

## Policy and ethics:

The authors declare that the experiment on patients were conducted in accordance with the relevant ethical standards and have passed the appropriate ethics boards.

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